US Army Corps
of Engineers®

Transformation of USACE Support to Installations

Corps Cost and Value Document

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Transformation of USACE Support to Installations
USACE Cost and Value Document

This document provides information about how the U.S. Army Corps of Engineers (USACE) determines costs. Our customers, federal and non-federal, at all levels, generally look upon USACE as an organization providing quality products and services. Naturally, we focus our attention upon providing those with careful regard for quality, timeliness and cost. This effort constitutes most of our day-to-day working relationships with our customers. However, there is another dimension to that relationship. I am referring to our cost of doing business and the way that our customers view it.

In support of the recent, major undertaking to implement Transformation of Installation Management (TIM), USACE embarked on a Transformation of Support to Installations (TSI) initiative to improve services to all customers. The aim is to maximize support of the regionalized Installation Management Agency (IMA), by engaging, at all levels, for best facilities with available resources and with priority on district-installation relationship. We also collaborate with the Assistant Chief of Staff for Installation Management (ACSIM) and IMA for standard processes and consistent levels of service and resource support, partner to embrace the life cycle approach to facilities acquisition, planning, design, construction, O&M and disposal, and leverage R&D capability to improve installation management. As a learning organization, we develop and use tools to improve support to military installations and the nation.

USACE is making great strides in training commanders and their technical staffs to manage on a business-like basis. We want our customers to see us as prudent, no-frills stewards of the resources entrusted to us. To that end, we have become conversant in the language and methods of the private sector, such as the Total Labor Multiplier. Our operating budgets are disciplined, independently administered processes for forecasting workload and living within our income, and we have simplified and standardized our cost accounting rules to fully support the fee-for-service nature of our business operations.

USACE provides a wide range of engineering services for -- and in *partnership* with -- its customers. This partnership is extended to include private-sector contractors to form a highly capable team. We hope the information contained in this booklet will assist in the continuous improvement of this partnership -- and the satisfaction of the most important team member -- *the customer*.

ESSAYONS!

Carl A. Strock
Lieutenant General, USA
Commanding

Outline

I. USACE Value

1. What is the USACE mission?

The U.S. Army Corps of Engineers (USACE) is responsible for design and construction of facilities to support the Department of Defense (DOD) and management of the nation's major waterways. Through its Directorate of Military Programs, USACE supports the Army, the Air Force, selected Navy locations, DOD and other federal agencies as well as international programs. It is also responsible, through its Directorate of Civil Works, for the planning, design, construction, and operation of civil works projects, including those accomplished in conjunction with state and local governments.

2. What is the USACE role in support of military installations?

Among the multiple roles and missions USACE performs, one of the most significant is Installation Support. Installation Support includes a broad spectrum of technical support ranging from community and facility planning to engineering (including protective design and security assessment), construction, utilities, environmental services, real estate, research and development, and technology transfer.

3. What USACE capabilities are available to U.S. installations around the world?

In addition to the technical engineering support services noted above, USACE has centers of expertise in hazardous and toxic waste remediation (HTRW --including rapid response capability), protective design, hydrant fuel systems, transportation, and unexploded ordnance. Our standard engineering services are integrated with a robust research and development capability through the U.S. Army Engineer Research and Development Center (ERDC), which consists of world-class laboratories in four locations across the U.S. We have a well-developed network of private firms, both major contractors and small/disadvantaged businesses, with whom we work to provide services. This diverse USACE capability is made available to installations to assist them in providing effective, efficient support to their military missions.

We are located near or with our customers. USACE has a global presence including permanent offices in Europe, Japan, Korea, Hawaii and Alaska, in addition to the continental U.S. Area and residence construction offices often are co-located on military installations. Also, districts have forward-deployed Installation Support Offices (ISO) and project managers on installations. While maintaining physical presence on-site, USACE has become adept at virtual teaming, so that engineering capabilities from any and all of its districts can be tapped from any site in the world, in real time.

4. What authorities are involved when USACE provides Installation Support services?

Does not really answer the question. Suggest using paragraph form as above, not bullets.

Here are some key points about USACE support to installations:

- USACE is a Major Command of U.S. Army. Installation Support to Army installations is *intra-service* support.
- Installation Support to Air Force installations/DOD agencies is i*nter-service* support.

- These support relationships are authorized and encouraged by DOD and Service policies and procedures to help government operations be efficient and effective.
- Installation Support is primarily *reimbursable support*.
- USACE is a *governmental, military* organization, not a contractor. Using USACE Installation Support is an efficient method to *augment* an installation's *organic* capabilities with USACE capabilities and services to accomplish the mission.

5. What services does USACE provide to installations?
Does not really answer the question. Suggest starting with last sentence. (Are we equating missions with services?)

USACE accomplishes a variety of engineering-related missions for military and civil works programs and customers. Accomplishing these missions creates and maintains expertise, tools and capabilities that may be applied to any of the missions and customers, including Installation Support activities. This combination of customers, missions, and capabilities is mutually reinforcing and beneficial. Services may be accomplished through any combination of in-house and contracted capabilities, depending upon circumstances and needs. Details on available USACE services may be found in Engineer Pam 420-1-1, *Installation Support Handbook*, located at the following web site: http://www.usace.army.mil/inet/usace-docs/eng-pamphlets/ep420-1-1/toc.htm

6. What are some unique USACE capabilities to augment installation management?
(Too much repetition!)

Engineering, construction, real estate and environmental-related services are *core missions and competencies* of USACE. USACE can bring special skills and expertise to solving installation facilities engineering challenges. A unique capability of USACE to augment an installation is our ability to provide *turnkey* engineering and construction services. USACE can scope, design, contract and manage the engineering or construction project/service for the installation, oftentimes using existing contracts and staff. This capability can be responsively provided, thus expanding an installation's organic capabilities. All this can provide installations substantial value at reasonable costs in a responsive manner. Studies, comparisons, experience and satisfied customers offer "proof" of the value of Installation Support to installations.

USACE Installation Support services are widely used by military installations. They are not in competition with organic capabilities. They *complement* an installation's other tools and capabilities to respond to a variety of mission-related needs.

7. How is USACE funded?

Customers fund project costs. While our Headquarters and division offices receive congressional appropriation (like other MACOMs), our district and field offices are self-supporting. Districts and field offices must recover their costs, both direct and indirect (training, human resources, resource management, etc.) by charging their customers for projects they perform on a reimbursable, full-cost recovery basis. As government entities, districts do not "make a profit." Instead, they use fully burdened labor accounting, similar to Defense Business Operating Fund (DBOF) organizations.

II. USACE Costs

8. What do USACE customers pay for?

In relation to the total USACE budget, approximately 94 percent of overall costs are direct charges for contract costs and USACE technical staff. About six percent are overhead costs. USACE manages its overhead costs through a working capital fund, also known as a revolving fund, which pays expenses as they are incurred and then is "repaid" by project funds.

9. How does USACE measure overhead cost performance?

Similar to private industry, USACE uses total labor multiplier and overhead rates as performance measures to evaluate efficiency and compare business performance with industry benchmarks and historical standards. In addition, USACE establishes not-to-exceed targets for the various rates as a means of controlling costs and remaining affordable to its customers. USACE also uses overhead information to identify both potential problems and best practices within an organization. USACE cost of doing business performance is built on concepts, criteria and formulas routinely used in private and public sector engineering and construction firms to evaluate efficiency and competitiveness.

10. Does USACE utilize independent agencies to review overhead cost policies and practices?

In 1990, USACE commissioned a study with *Grant Thornton* that examined existing overhead collection and allocation policies and practices. The study recommended significant changes to the overhead allocation methodology used by USACE. USACE implemented the study recommendations, resulting in simplified policies and procedures more consistent with the private sector.

In 2000, the *Logistics Management Institute (LMI)* found that USACE overhead policies and procedures are fundamentally sound and recommended USACE continue to use overhead policies and procedures currently in place. LMI also recommended, and USACE implemented, several actions to ensure its overhead policies and procedures are simple and easily understood, can be applied consistently and uniformly by all activities, are equitable and credible to customers, and make good business sense.

11. How does USACE construction management compare with the private sector?

In 1999, the *Logistics Management Institute (LMI)* found that USACE project cost, time, quality management, and project/contract administration business processes are fundamentally sound and align closely with processes performed by private-sector firms and other government agencies that manage construction projects. Using the *Construction Management Association of America (CMAA)* format for identifying services provided, the *LMI* compared USACE traditional construction activities with private industry. Although USACE, as steward of Army installation and major national waterways infrastructure, has some additional responsibilities in managing public infrastructure vis-à-vis the private sector, the construction management activities are similar.

12. How do installation and USACE costing policies and practices compare?

INSTALLATION	***DISTRICT***
I. In-House Labor Costs	
Basic Rate: labor at Government salary scales	Basic Rate: labor at Government salary scales

# Hours Paid: varies by task and efficiency	# Hours Worked on Project: varies by task and efficiency
Fringe Benefits: standard Government rate	Fringe Benefits: standard Government rate
Overhead*: calculated based on 95 BASEOPS standard service costing and activity based costing models.*	Overhead*: departmental overhead (DOH) and General and Administrative (G&A) added to direct labor to produce "fully burdened rate."*

First cost and *final cost* are one aspect of a *best value* decision. USACE districts use fully-burdened, full-cost accounting. Installations are primarily *direct* funded; their cost accounting does not accumulate all direct and indirect costs to a *job basis*. As A-76 cost studies show, valid comparison requires all alternatives be brought to an equal basis.

II. Establishing Contract Requirements

Establishing an initial capacity (such as an in-house or contract capability) incurs an initial cost that is real but is not often identified to subsequent products and services obtained via that capacity. An example is establishing a construction contract management capacity at an installation. Planning, recruitment, training, retention, working space and equipment would be incurred in establishing or maintaining a construction contract management capacity at an installation; however, these costs would not usually be recognized and attributed to each *particular* job managed with that capacity. As a fully reimbursable organization, USACE costs reflect a *total cost* recovery. USACE costs are often spread over a large work base and, through *economies of scale*, are often an affordable, best value option. Also, specialized expertise can be developed and maintained when such economies of scale exist.

III. Contract Acquisition and Management Costs

INSTALLATION	***DISTRICT***
Initial Contract: As set by marketplace:	Initial Contract: As set by marketplace
Contract and Eng/Const Mgt Costs: *some* costs (e.g., direct civilian labor) from DPW/BCE accounted on job basis; other costs (e.g., contracting staff, legal, CI, F&A) not accounted for in the apparent cost of service/product	Contract and Eng/Const Mgt Costs: *all* cost accounted (via either fully burdened actual labor costs for non-const or flat rate S&A fee (6..5%) for construction contract management
Contract Contingency Costs: set by marketplace	Contract Contingency Costs: set by marketplace

USACE is not a contractor; it is a government organization. As such, it is able to perform *inherently governmental functions* and bring a wide range of in-house and contractor assets into play. Periodically, USACE costs for various services have been compared with other government agencies and private-sector services. For instance, USACE construction S&A rates (5.7% MILCON; 6.5% O&M) were found to be competitive with comparable private-sector activities.

13. Since USACE districts receive no direct funding, how are customers charged for USACE labor costs?

USACE districts must charge hourly labor rates that are *fully burdened* with all costs associated with government service employment. This method of charging for labor is common in the private sector but not on a military installation. The burden placed on each hour of labor is called *total labor multiplier*.

14. What is Total Labor Multiplier (TLM)?

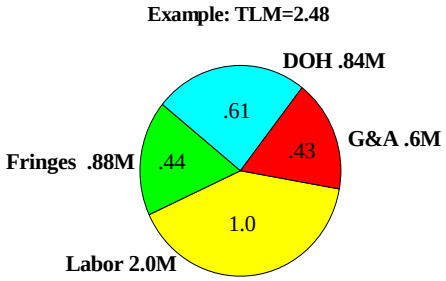
TLM is a measure of cost efficiency used by USACE and the private sector that expresses, as a multiple, the ratio for each direct labor hour to recoup labor costs, fringes and overheads. The TLM is a multiple of the base pay rate of an individual working on a project. It is designed to capture the costs of salary plus fringes on that salary, departmental overhead associated with the labor, and general and administrative charges distributed to the project in correlation with the labor. It is a measure of USACE labor-billing rates to customers, and thus, measures cost efficiency. The TLM is calculated separately for various types of work (Military Design Except HTRW, Military Design HTRW, Military Construction, Military Real Estate, Civil Design, Civil Direct Construction Except HTRW, Civil Planning, Civil O&M).

Effective rate = **a**

DOH rate X **a** = **b**

G&A rate X **a** = **c**

a + **b** + **c** = TLM



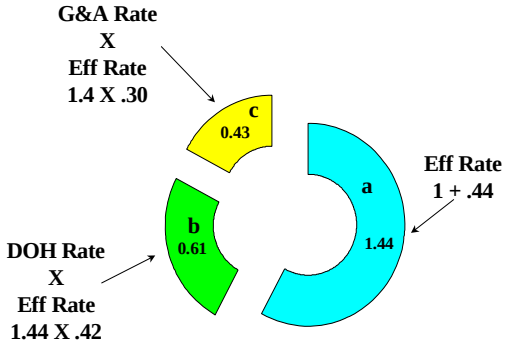
Example:

Base(1) + 44% = 1.44

1.44 X DOH rate (42%) = .61

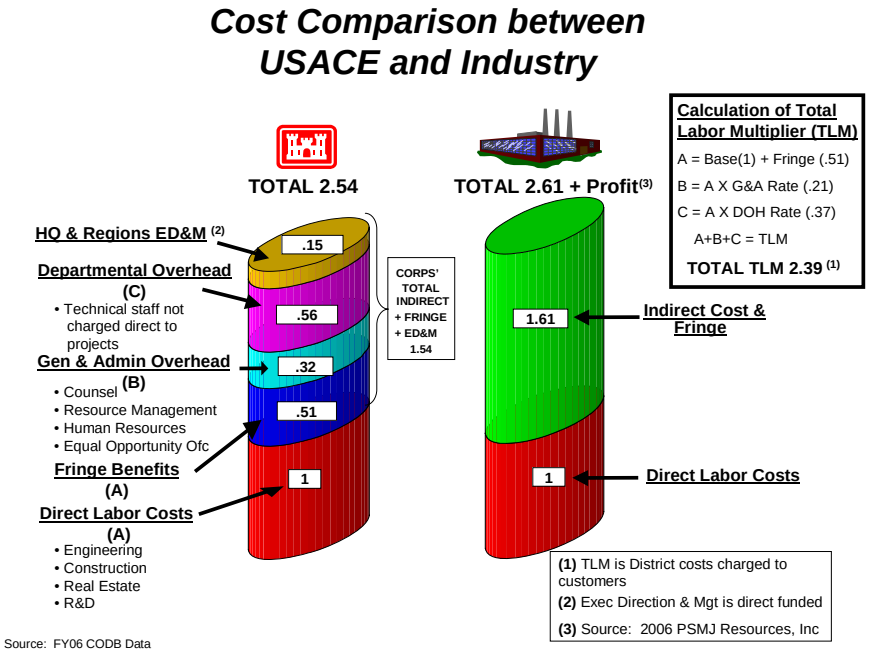
1.44 X G&A rate (30%) = .43

1.44 + .61 + .43 = 2.48



15. How does USACE TLM compare with private industry?

According to an independent study by PSMJ Resources, Inc (Professional Services Management Journal), USACE TLM is very competitive with the private construction industry.



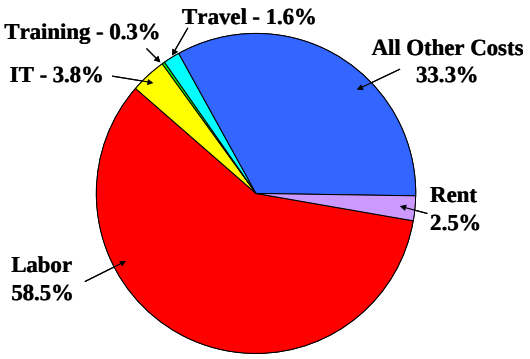
16. What is the definition of overhead?

In general, overhead comprise costs that cannot be allocated definitely and specifically to individual projects or programs. Traditionally, the Corps has maintained two categories of overhead: general and administrative (G&A) expenses and departmental overhead (DOH).

17. What is General and Administrative (G&A) overhead?

G&A expenses are administrative and support expenses incurred in day-to-day operations that benefit all elements within a district, including the executive office and advisory and administrative (A&A) staff offices. The G&A rate is charged against a direct labor hour to recoup G&A costs. The G&A rate is applied to direct labor hour charges of all employees within a district. Separate G&A rates are established for military programs and civil works activities.

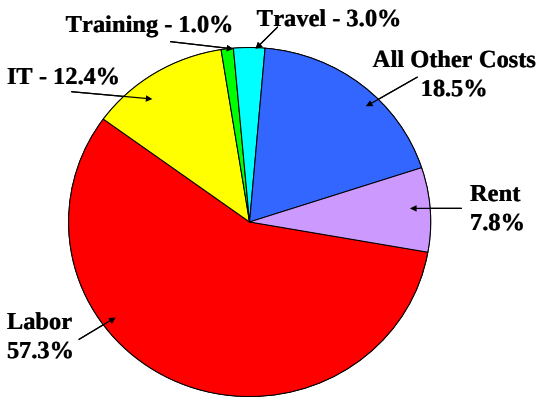
G&A Overhead



18. What is the definition of Departmental Overhead?

Departmental overhead (DOH) comprises overhead costs within technical divisions at district headquarters (engineering, construction, project management, etc.) not attributable to a specific project. DOH includes labor of section, branch, and division chiefs and their administrative staffs, as well as various other administrative and support costs (contracts, supplies, awards, training, travel, etc.). The DOH rate is charged against a direct labor hour to recoup DOH costs. The DOH rate is applied to the direct labor charges of all employees within a technical division at the district headquarters. Separate DOH rates are established for military and civil works activities.

Departmental Overhead



III. Planning and Design (P&D) and Construction Supervision and Administration (S&A)

19. What is Planning and Design (P&D) and how is it funded?

Title 10, United States Code, Section 2807 authorizes the Department of Defense to perform P&D efforts for military construction or land acquisition projects. P&D functions are efforts necessary to develop preliminary project cost estimates. Each appropriation account carries its own line item for P&D efforts. Functions that may be performed under the authority of P&D include preparation of plans and specifications, Value Engineering (VE) studies, development and update of design criteria and manuals, preparation of standard designs, management of design and Architectural and Engineering (AE) contracts, printing and reproduction of construction contract documents and liaison with prospective bidders prior to award of the construction contract.

OSD has developed an algorithm as a guideline to program P&D for military construction. P&D is 4.5 percent of total obligation authority (TOA) of the program year (PY) plus one and 4.5 percent of PY plus two. For instance, P&D in FY 03 would be derived by taking 4.5 percent of the total of all construction projects contained in the FY 04 program and adding 4.5 percent of the total of all construction projects contained in the FY 05 program.

20. What is Construction Supervision and Administration (S&A)?

In simple terms, construction S&A represents activities performed and costs incurred which are generally considered government construction contract management responsibilities. A listing of typical construction management services is included at the back of this booklet in Appendix A.

The U.S. Army Corps of Engineers provides construction management services for a wide variety of projects. These services are charged to and financed by the *individual project* through application of a construction supervision and administration (S&A) charge.

Normally, for DOD construction support, S&A is charged on a flat rate basis that conforms to the general type (i.e., O&M or MILCON) and project location (i.e., CONUS or OCONUS). Non-military customers, and some special military projects, are charged on a cost-reimbursable basis determined by the level of effort mutually agreed upon with the customer.

21. Why do I need Construction S&A services for my project?

Effective supervision and administration of construction contracts and projects are key to a successful outcome... both for the customer *and* the contractor. Why? Because many *critical* decisions and verifications need to be made right and on time during the *construction phase* of all but the most rudimentary projects.

While the scope, criteria, design, contract terms and amount have been decided before contract award, many decisions are *general* in nature. The *exact specifics* are determined during construction. Also, there are many unknowns such as precise soil conditions that become known only when dirt or soil or is actually excavated.

There also is a significant difference between *drawing up* a project and a contract in the office -- and *building* the project on site, with beams, tolerances, connections, loads... and people. Then there is the small matter that contracts don't automatically enforce themselves... people make judgments and interpretations, and take actions necessary to ensure equity, propriety, and success for all involved parties – and get the project built.

The bottom line is projects and contracts *do not* administer themselves. Using skilled professionals to ensure construction and the contract are done right is a force multiplier. It would be unwise to go through the time, effort and expense of planning, programming, design, and contracting -- and then "fire and forget" during the construction phase, hoping, magically, all these elements will come together on the ground. No prudent manager, investor or owner does this, either in the private sector or in the Department of Defense. Your investment in construction S&A is a necessity.

22. How are Construction S&A costs charged?

Construction S&A for almost all military funded projects is charged at a *flat rat*e. As the construction costs are incurred (i.e., progress payments made to contractors), a flat rate percentage of construction placement is charged to the project. The *location* and *fund type* dictate which flat rate will apply. The *CONUS* rate is used for the lower 48

states and the District of Columbia, while the *OCONUS* rate is used for Alaska, Hawaii, and other overseas locations. The OCONUS rates are higher because of higher costs overseas.

Fund types are grouped into three categories for Construction S&A purposes. MILCON includes *Military Construction, Army/Air Force* (MCA/MCAF*), Base Realignment and Closure* (BRAC), and *Production Base Support* (PBS) funds. O&M includes *Operation and Maintenance* (Active/Reserve), *Other Procurement* (OPA), and *Research, Development, Testing and Evaluation* (RDT&E) appropriations. DERP includes *Defense Environmental Restoration Program* (DERP), *Installation Restoration Program* (IRP), *Formerly Used Defense Sites* (FUDS), and BRAC environmental appropriations.

Projects that are funded by non-appropriated funds, foreign military sales, host nations, and other non-DOD funds are charged *actual* S&A costs for each project because of the unique fiscal laws applicable to these programs. For this non-flat rate S&A work, we develop a target rate with the customer, based on the level of the services to be performed. While we make every effort to manage within this target rate, final charges are based on actual costs incurred.

The flat rate was established in 1963 at 7.5%. In 1989, separate CONUS and OCONUS rates were established. Since 1995, the CONUS rates have been 5.7% for MILCON and 6.5% for OMA.

23. What are the current Construction S&A rates?

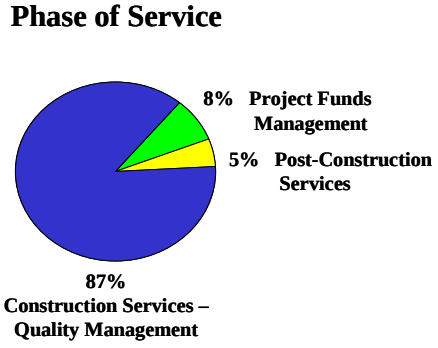
The construction S&A rate depends on the *type* of construction (e.g., MILCON or OMA) and the *location* (i.e., CONUS or OCONUS). The following table presents S&A rates for FY03:

Fund Type	CONUS Locations	OCONUS Locations
MILCON	5.7%	6.5%
O&M	6.5%	8.0%
DERP	8.0%	8.5%

as of 1 Jan 03

24. What does my Construction S&A dollar really buy for me?

This chart summarizes what your construction S&A dollar buys-- mostly construction quality services, including contract management. The remaining portion buys project

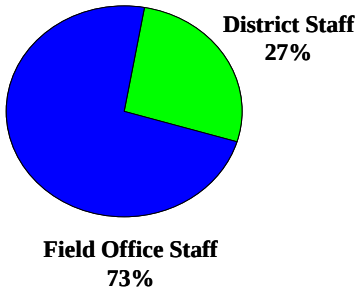


payment and funds management, and post-construction completion and closeout management.

25. Who provides these Construction S&A services?

Our construction area and resident field offices provide most of the services. District personnel also provide S&A services directly supporting construction projects.

Source of Construction Management Services



26. Why am I charged the same Construction S&A rate on large projects as I am for small projects?

Construction S&A flat rates are *average costs* for each project class. Since S&A rates are not set for each project, these *flat rates* allow construction management costs to be recovered within each class or group of projects. This means that for any *individual* project, the *actual* S&A *costs* will not necessarily match the flat rate *charge*d. Usually, larger projects subsidize smaller ones. With a variety of projects, these differences average out. The additional administrative effort would add significantly to the rates charged to customers if cost were managed for each individual project.

27. Are USACE Construction S&A services more expensive than private sector services?

No. USACE charges (for MILCON, O&M and PBS projects) when compared to *private sector contractors* are generally lower. Source: LMI Construction Management Study (CE309R1), dated May 1994.

Program	Private Section Median Cost	Corps CONUS Charge
Family Housing	5.3%	5.7%
MILCON	6.6%	5.7%
O&M	7.1%	6.5%
PBS	7.7%	5.7%

28. How do USACE Construction S&A services stack up against those in the private sector?

Few private-sector construction management firms offer the range of services USACE provides. Contracting relationships in the private sector are typically more structured and involve fewer layers than government contracting procedures. The private construction manager, for example, does not have the contracting authority given to USACE and must pass some work back to the owner. Regulations require all resident engineers to be registered professional engineers who also have completed acquisition training in compliance with the Defense Acquisition Workforce Improvement Act. These experience and training qualifications are not commonly found in the private sector.

29. What S&A services does USACE provide during construction that the private sector does not?

Handling claims, negotiating change orders, and administering warranties and guarantees are some of the extra services provided by USACE. USACE handles programs to help small, disadvantaged, and minority businesses, ensuring the work is done safely and complies with minimum wage rates under the Davis-Bacon Act. The contractor ensures a drug-free workplace, and Buy American Act provisions are met.

30. Does USACE Construction S&A charge pay for project management at the District Office level?

Project management at the district, during the construction phase, is paid out of S&A income. The project managers normally have more involvement during the design phase of the project, and the district project management costs reflect this. Currently, about 4 percent of the *construction phase S&A costs* are allocated for district project management costs during construction.

31. How does USACE ensure adequate construction field office staffing?

USACE obtains manpower allocations from the Department of the Army headquarters. Requirements are determined with the aid of a computer model that looks at *past experience* and *current workload*. The model helps determine the staffing allocation at each district. Finally, the quality assurance plan developed for each project helps determine *how many* people and what skills will be assigned to field offices. The project is monitored to ensure that assigned staffing matches the project's requirements. Adjustments during the construction phase are common. USACE also uses contracted technical services to augment its staff to fill gaps or provide specialized technical skills.

32. How does USACE charge for non-construction services?

All USACE district services *except* flat rate construction S&A are charged on an *actual cost* basis. These services include studies, planning, design, real estate, etc. Funds for these services are normally transferred to USACE on a military interdepartmental purchase request (MIPR). Flat rates are <u>not</u> used for non-construction services.

33. Why do I have to pay for USACE "mistakes" during design, contracting, or construction phases of the project?

Fairness seems to require that when USACE takes on a job it would be *financially liable* for any mistakes it makes. This is how people allocate risk when dealing with contractors, and it seems analogous to "hiring" USACE to perform certain design, contracting or construction services, but the U.S. Army Corps of Engineers is a government agency not a contractor. Contractors cover risk by charging each customer a little more, and buying insurance. Government agencies do not purchase insurance for professional liability. Instead, government agencies *self-insure,* meaning the federal government assumes the risk of mistakes, rather than allocating this to a third party.

USACE districts are *project funde*d, and they do not have bulk funds they can draw on to correct mistakes. USACE districts do not charge above actual costs to accumulate a reserve and also cannot charge the correction of a mistake for one customer *to another*. The *only* way a government employee's mistake in the design or construction contract can be corrected is to obtain the necessary funds from the customer.

34. Are USACE construction S&A services more expensive than those provided by installations or other customers?

It is hard to give a conclusive reply to this question. As mentioned earlier in this booklet, USACE *districts are project funded.* This means that the districts must recoup all of their *direct and indirect costs* from the fees they charge customers. Accordingly, USACE cost accounting system is very different from that found at a typical installation or customer organization.

Customer cost accounting systems typically collect only the *direct costs* of the *construction management organizatio*n. No direct or indirect overhead (supervision, utilities, training, personnel fringe benefits, etc.) costs are typically accumulated and spread to the customer's construction management function. Also, costs for support organizations *outside* the installation engineering or public works organization -- such as resource management, safety, contracting, legal, personnel, information management, or training – are typically not accumulated and spread to the customer's construction management function. Military personnel costs are also typically recorded as "no cost" labor under these customer systems, even though real effort and real money are expended. Finally, the level of risk and complexity of projects, or the level of management intensity, may not be comparable.

These and other reasons make it difficult to make easy and reliable cost comparisons between USACE and a customer's accomplishment of the construction supervision and administration duties. Neither the customer's nor USACE's approach will be right for *every* situation or project. *Accordingly, it is important for customers to be sensitive to the **total costs** of doing work by themselves, and compare this against Corps charges and other attributes.*

35. Am I really getting a good deal with Construction S&A?

Yes. We give you *more service* for *fewer dollars* than the private sector does, and don't charge you for some services. That is not to say there is no room for improvement. We're always looking for ways to improve and economize and continually review our construction management policies and practices to improve them --- and our service to you. We hope these efforts will enable us to continue providing the level of service you deserve... at a time when both of us are feeling the impacts of diminishing budgets.

36. Where did you get the data for this document?

(TSI is Transformation of Installation Support as stated earlier.)

The cost information compiled here came from many sources. The comparisons with the private sector came from a survey conducted by the *Construction Management Association of Americ*a. The distribution of dollars and effort was determined in an independent study by the *Logistics Management Institut*e. This document was the product of the USACE 2002-2003 Transformation of USACE Installation Initiative's Cost Team. The Cost Team membership was comprised of representatives from the Office, Assistant Chief of Staff for Installation Management (ACSIM), the HQ Installation Management Agency (IMA), Northeast Installation Management Region, Fort Lewis Directorate of Public Works (DPW), HQ US Army Corps of Engineers (HQUSACE), North Atlantic Division, and the Louisville District. We also solicited data from customers and our most experienced field level staff. Information on TSI is available at Installation Knowledge On-Line at http://www.cecer.army.mil/KD/iko/.

Appendix A

Typical USACE Installation Support Services
(From EP 420-1-1)

Planning and Programming Support Services
- Economic and Social Analysis
- Project Development and Advanced Planning
- Real Property Master Planning
- Installation Design Guide
- Mapping and Surveying
- Computer-Aided Design and Drafting Systems (CADD)
- Feasibility Studies
- Space Utilization Planning

Environmental Support Services
- Environmental and Cultural Resources
- Permitting
- Underground Storage Tank Program
- Environmental Base Line Surveys/Preliminary Assessment Screening
- Spill Prevention
- Landfill Closure Plan
- Flood Plain Management

Real Estate Support Services
- Research and Prepare Required Real Estate Reports
- Acquire Real Property by Purchase, Lease or Condemnation
- Negotiate Army Leases
- Appraisals and Rental Schedules for Government-owned Land and Housing
- Participate in Site Selections for U.S. Army Reserve Centers
- Temporary Easements, Permits, Rights of Entry, Maneuver Rights and Grazing Rights
- Provide Assistance in Handling Annexations by Municipalities
- Provide Assistance during Mobilization Periods
- Administer the Outgrant Program
- Research and Duplicate Legal Documents
- Provide Relocation Assistance
- Provide Assistance in Preparing the Real Property Survey Report
- Dispose of Land, Buildings, Timber, Gravel, etc.
- Provide Assistance in the Disposal of Excess Foreign
- Assist in Preparation of Reports of Excess Land
- Terminate Inleases and Outgrants
- Arrange for Provision of Homeowners' Assistance
- Process and Administer Damage Claims Against the Government
- Administer the Provisions of the McKinney Act
- Provide Assistance with Curative Matters Regarding Encroachment
- Prepare and Execute of Build-to-Lease and Lease-Purchase Arrangements
- Provide Assistance in Determining Proper Legislative and Legal Jurisdiction Issues
- Execute the Disposal of Real Property Assets
- Assist Installation in Determining Water Rights

APPENDIX A

Typical USACE Installation Support Services (Cont'd)

Architect-Engineer Support Services

- Types of Architect-Engineer Contracts
- Selection and Award of an Indefinite Delivery Contract
- Administration of Delivery Orders

Engineering Support Services

- Studies and Investigations
- Dam and Bridge Inspection
- Design
- Reviews
- Surveying
- Interior Design Services
- Cost Engineering
- Specifications
- Forensic Engineering
- Value Engineering
- Technical Criteria

Construction Management Services

- Construction Project Management
- Quality Assurance
- Contract Administration
- Funds Control
- Field Engineering Management

Design/Bid Phase Services

- Perform on-board technical reviews of plans and specs
- Perform biddability, constructability, operability/maintainability and environmental (BCOE) reviews, back-checks, and certifications
- Conduct site visits for bidders
- Establish estimated contract durations
- Participate in development of contract acquisition plans, IFB/RFP preparation, and source selection boards
- Participate in Design Review Conferences
- Participate in Design Charettes
- Participate in 1391 Reviews
- Through the Installation staff, maintain awareness of future projects and likelihood for success
- Prepare field office staffing plans based on upcoming work
- Prepare staff training plans based on future work

Construction Phase Services

<u>Construction Quality Assurance (QA) Activities</u>

- Prepare QA plans and review contractor's Quality Control Plan
- Review contractor's submittals, safety plan, etc.
- Oversee/provide Materials labs certifications
- Perform Compliance Checks on Contractor QC Program

APPENDIX A

Typical USACE Installation Support Services (Cont'd)

- Monitor contractor progress
- Provide coordination for contractor requests for information
- Review contractor daily quality control reports
- Witness critical testing activities

On-site Project Management Activities

- Conduct pre-construction meetings, safety conferences, etc.
- Oversee contractor's time schedules
- Conduct partnering activities (customers, contractors, regulators)
- Participate in regular partnering meetings with contractors

Contract Administration/Management Activities

- Process contractor pay estimates/verify quantities
- Analyze, prepare and execute contract modifications
- Manage any Government-furnished equipment/materials
- Analyze potential engineering discrepancies and initiate A-E responsibility reviews
- Oversee contractor's compliance with safety, small business, drug-free workplace, Buy-American, and similar contract provisions
- Resolve contract disputes using alternative dispute resolution
- Provide status information to installation staff and higher authorities
- Manage project turnover/commissioning process (including preparation of DD Form 1354)
- Perform warranty inspections and support enforcement of warranty clauses
- Review and process as-built drawings
- Complete contractor and AE performance evaluations
- Perform contract closeout
- Enforce latent defect actions

Construction Fiscal Management Activities

- Manage construction contract funds
- Manage S&A funds
- Prepare financial reports (internal and external DFAS)
- Monitor time and cost growth

Appendix B

Acronyms Used in This Booklet

A&A	Advisory and Administrative
ACSIM	Assistant Chief of Staff for Installation Management
AE	Architectural and Engineering
BCE	Base Commercial Equipment
BRAC	Base Realignment and Closure
CI	Corporate Information
CMAA	Construction Management Association of America
CONUS	Continental United States
DBOF	Defense Business Operating Fund
DERP	Defense Environmental Restoration Program
DFAS	Defense Finance and Accounting Service
DOD	Department of Defense
DOH	Departmental Overhead
DPW	Directorate of Public Works
ERDC	Engineer Research and Development Center
F&A	Finance and Accounting
FUDS	Formerly Used Defense Sites
G&A	General and Administrative
HTRW	Hazardous, Toxic, and Radioactive Waste
IFB	Invitation for Bid
IMA	Installation Management Agency
LMI	Logistics Management Institute
IRP	Installation Restoration Program
IS	Installation Support
ISO	Installation Support Offices
MCA	Military Construction, Army
MCAF	Military Construction, Air Force
MILCON	Military Construction
MIPR	Military Interdepartmental Purchase Request
O&M	Operation and Maintenance
OCONUS	Outside the Continental United States
OPA	Other Procurement, Army
OSD	Office, Secretary of Defense
PBS	Production Base Support
P&D	Planning and Design
PDT	Project Delivery Team
PSMJ	Professional Services Management Journal
PY	Prior year
RFP	Request for Proposal
RDT&E	Research, Development, Testing and Evaluation
S&A	Supervision and Administration
TOA	Total Obligation Authority
TIM	Transformation of Installation Management
TLM	Total Labor Multiplier
TSI	Transformation of Support to Installations
USACE	U.S. Army Corps of Engineers
VE	Value Engineering